

**DYNAMIC MULTICAST ROUTING FACILITY FOR A
DISTRIBUTED COMPUTING ENVIRONMENT**

Abstract of the Disclosure

A Dynamic Multicast Routing (DMR) facility is provided for a distributed computing environment having a plurality of networks of computing nodes. The DMR facility automatically creates virtual interfaces between selected computing nodes of the networks to ensure multicast message reachability to all functional computing nodes within the distributed computing environment. The DMR facility employs a group of group leader nodes (GL_group) among which virtual interfaces for multicast messaging are established. Upon failure of one of the group leader nodes, another computing node of the respective network having the failing group leader node is assigned group leader status for re-establishing virtual interfaces. Virtual interfaces are established between the group leader nodes such that redundancy in message routing is avoided.